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| 09/901,044 | 07/10/2001 | Takeshi Nishiuchi | 010883 | 6430 |

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EXAMINER

MORGAN, EILEEN P

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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3723

DATE MAILED: 03/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/901,044

Applicant(s)
Nishiuchi et al.

Examiner
Morgan

Art Unit
3723



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 10, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4 20) ☐ Other:

Art Unit: 3723

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the tubular barrel in the shape of a rhombus and square must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase “in a vertical sectional form” used throughout the claims is unclear. It is not understood what ‘form’ this is or how it is used in relation to the rotational axis. Cl. 7, what is a “form of a convex-formed curve”? “in a part thereof”? Part of what? How is it with respect to the rotational axis? Same for claim 8. How is a shape defined by a rotational axis? Cl. 10, what is a “forward side of rotation in the vertical sectional form”? These claims are totally unclear. Cl. 11,

Art Unit: 3723

what is a 'comb form'? 'Plate form'? Cl. 12 'in the number' is unclear. Cls. 13 & 15 is totally unclear. Cl. 14, 'structured by a linear member' is unclear. Cl. 17 the alternative 'and/or' is unclear. Cl. 20 "barrels" lack antecedent basis. What is a 'circumferential outward'? Cl. 21 what is a deposition apparatus. Cls. 23-26 do not further limit the apparatus of claim 1 and are improper dependent claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-4,7-12,21, 23-26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Pletscher - 3,948,003.

Pletscher discloses the claimed dry surface treating apparatus having a tubular barrel having protrusions or being in the shape of a regular triangle for treating workpieces.

Claims 23-26 do not further limit the apparatus of claim 1.

Art Unit: 3723

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5,6,13-17, rejected under 35 U.S.C. 103(a) as being unpatentable over Pletscher, alone.

In regard to claims 5 & 6, Pletscher does not show the tubular barrel being in the shape of a square or rhombus. However, to change the shape of the barrel would have been obvious to one of ordinary skill in the art at time invention was made in order to accommodate differently shaped workpieces and to produce various machining effects.

In regard to claims 13-17, to have more than one compartment in the barrel would have been obvious at time invention was made to one of ordinary skill in the art in order to individually treat a variety of workpieces simultaneously.

8. Claims 18-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Pletscher in view of Steube - 4,116,161.

Pletscher does not show a mesh porous surface or a plurality of barrels about a rotational axis. However, Steube teaches a tumbling apparatus having a mesh porous peripheral surface and having a plurality of barrels spaced about a rotational axis. Therefore, to provide the barrel of Pletscher with a mesh porous surface, as taught by Steube, would have been obvious at time

Art Unit: 3723

invention was made to one of ordinary skill in the art in order to filter out abraded debris from workpiece. In addition, to have a plurality of rotating barrels, as taught by Steube, would have been obvious at time invention was made to one of ordinary skill in the art in order to more efficiently abrade a larger number of workpieces.

9. Claim 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Pletscher in view of Kanouse - 5,782,677.

Pletscher does not disclose the barrel used as a blasting chamber. However, Kanouse teaches an apparatus having a tubular barrel for blast treating workpieces. Therefore, it would have been obvious at time invention was made to one of ordinary skill in the art to provide the apparatus of Pletscher with a blasting nozzle, as taught by Kanouse, in order to more thoroughly abrade workpieces.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Morgan whose telephone number is (703) 308-1743.



EILEEN P. MORGAN
PRIMARY EXAMINER

EM

March 18, 2002